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EDITORIAL COMMENT

To Stent or Not to Stent—That Is the Question*

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Occasionally, one comes across an article in which one or more of its authors questions or challenges a concept or conclusion that they had previously held or championed. This speaks highly of our profession and our colleagues. Cappelletti et al.'s (1) report in this issue of *JACC* is such an article. It challenges us to modify our present indications for the use of stents.

See page 1484

There is no question that the introduction of stents and their subsequent refinement have enabled us to safely and successfully apply transluminal coronary artery therapy to a significantly broader spectrum of clinical and anatomic situations as compared with balloon angioplasty alone, but do we deploy stents too frequently? Are there situations in which stents are either unnecessary or not indicated? Are there situations in which the cost of stents cannot be justified?

Because of its design, it would not be appropriate to use the findings of this study to argue either for or against the routine use of stents. However, some might be tempted to use the reported findings to support a policy discouraging the use of stents in the presence of coronary artery dissections. I would caution against this. The authors' study group is small (49 unstented patients) and limited to a single institution. Therapy was not randomized, and the study was retrospective. Nevertheless, I agree with the authors in that in the presence a type A and B dissections in a relatively tortuous vessel ≤2.5 mm in diameter, it appears that stenting may not be indicated. Also, I agree with the authors in that their findings suggest that in the presence of dissections that are not associated with flow limitation and that are in vessels ≤3 mm in diameter, the use of endovascular prostheses should be evaluated carefully. However, because the majority of the dissections the authors reported were types A and B, the results can only be inferred to apply to patients with these lesions.

Cappelletti et al.'s (1) study supports the contention that type A and B dissections are relatively benign complications of percutaneous transluminal coronary angioplasty. When faced with these dissections, cardiologists have only two therapeutic options: 1) deployment stents, or 2) prolonged observation in the catheterization laboratory with or without prolonged balloon inflations. Hence, necessarily, one must ask which option is associated with the most appropriate balance between therapeutic benefit and cost? This question remains unanswered. Further, in clinical practice, how often would these options be associated with the need to return patients to the catheterization laboratory for emergent or semi-emergent follow-up, even though the authors report no such need? Again this question remains unanswered.

Finally, although the authors report no clinically adverse effects in the 38% of patients who had angiographically visible dissections at six-month follow-up, one must be concerned about long-term prognosis—for instance, the subsequent incidence of myocardial infarction.

Despite its limitations and the fact that it failed to provide answers to the questions I have posed, Cappelletti et al.'s (1) study is important in that it reminds us that as custodians of our patients' health, we must continually seek to refine our indications for therapeutic options, or, in this instance, to paraphrase Shakespeare: *To stent or not to stent, that is the question?*

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